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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HOM, SHICK C

ART UNIT PAPER NUMBER

2666

DATE MAILED: 10/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/579,371

Applicant(s)

KANT ET AL.

Examiner

Shick C Hom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9,15,16,24,26,27 and 30-41 is/are rejected.
- 7) ☒ Claim(s) 3-8,10-14,17-23,25,28 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

2. Claims 12 and 30 are objected to because of the following informalities: in claim 12 line 6, insert period after the word "headers" to end sentence. In claim 30 lines 11-12, the words "a flow of either the first class" seem to refer back to "a flow of either the first class" recited in claim 30 lines 3-4. If this is true, it is suggested changing "a flow of either the first class" to ---the flow of either the first class---. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 30 line 10, which recite "the second point" lack clear antecedent basis because no second point have been previously recited in the claim and therefore the limitation is not clearly understood.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 9, 15-16, 26-27, 31-33, and 36-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi et al. (6,614,763).

Regarding claim 1:

Kikuchi et al. disclose the method for measuring network performance (col. 2 lines 49-67), comprising: dividing packets flowing through a first point into frames, the first point being any point in the network that supports a packet flow (see the

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plurality of probing packets which corresponds to the frames and the sending side unit which corresponds to the first point in col. 5 lines 8-24 and col. 7 line 63 to col.8 line 29); capturing information about the packets in packages that correspond to the frames; correlating each package with packets flowing through a second point, the second point being any point in the network that supports the packet flow (where each n probing packets correspond to a package and the reception side unit corresponds to the second point in col. 7 line 63 to col. 8 line 29); and calculating network performance information based on the correlated packages (see the computer for calculating the correlations which corresponds to calculating based on correlated packages in col. 6 lines 34-56).

Regarding claim 31:

Kikuchi et al. disclose the system for measuring network performance (col. 2 lines 49-67) comprising: at least a first and a second monitoring device for monitoring packets associated with a plurality of packet flows and connected to any point in the network (the transmission time measurement unit and the packet reception measurement unit in col. 17 line 44 to col. 18 line 33 clearly read on the first and second monitoring device as claimed); and at least a first and a second processing device for determining network performance information, each processing

device respectively connected to each of the first and second monitoring devices (the first and second estimation processing units in col. 18 lines 34-36 reads on the first and second processing device for determining performance information).

Regarding claim 37:

Kikuchi et al. disclose the method for measuring performance of a network (col. 2 lines 49-67), said method comprising the steps of: dividing packets flowing through a first point into frames, the first point being any point in the network that supports a packet flow (see the plurality of probing packets which corresponds to the frames and the sending side unit which corresponds to the first point in col. 5 lines 8-24 and col. 7 line 63 to col.8 line 29); collecting information about the packets and the frames; correlating the collected information with packets flowing through a second point, the second point being any point in the network that supports the packet flow (where each n probing packets correspond to the collected information about packets and the reception side unit corresponds to the second point in col. 7 line 63 to col. 8 line 29); and calculating the performance of the network based on the correlated information (see the computer for calculating the correlations which corresponds to

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calculating based on correlated information in col. 6 lines 34-56).

Regarding claim 38:

Kikuchi et al. disclose the method for measuring performance of a network (col. 2 lines 49-67), said method comprising the steps of: dividing packets flowing through a first point into frames, the first point being any point in the network that supports a packet flow (see the plurality of probing packets which corresponds to the frames and the sending side unit which corresponds to the first point in col. 5 lines 8-24 and col. 7 line 63 to col.8 line 29); receiving information about the packets and the frames; correlating the received information with packets flowing through a second point, the second point being any point in the network that supports the packet flow (where each n probing packets correspond to the received information with packets and the reception side unit corresponds to the second point in col. 7 line 63 to col. 8 line 29); and calculating the performance of the network based on the correlated information (see the computer for calculating the correlations which corresponds to calculating based on correlated information in col. 6 lines 34-56).

Regarding claim 40:

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Kikuchi et al. disclose the method for measuring performance of a network (col. 2 lines 49-67), said method comprising the steps of dividing packets flowing through a first point into frames, the first point being any point in the network that supports a packet flow (see the plurality of probing packets which corresponds to the frames and the sending side unit which corresponds to the first point in col. 5 lines 8-24 and col. 7 line 63 to col. 8 line 29); and capturing information about the packets and frames, such that the information is correlated with packets flowing through a second point in the network that supports the packet flow (where each n probing packets correspond to the captured information about packets and frames and the reception side unit corresponds to the second point in col. 7 line 63 to col. 8 line 29 and col. 6 lines 34-56).

Regarding claim 2:

Kikuchi et al. disclose wherein the dividing step comprises: selecting a header associated with the packets flowing through the first point (col. 17 line 58 to col. 18 line 23); associating the header with the packet flow; and storing the header in a storage associated with the packet flow (col. 16 lines 25-57).

Regarding claim 9:

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Kikuchi et al. disclose wherein the packets are Internet Protocol packets (col. 7 lines 43-62).

Regarding claim 15:

Kikuchi et al. disclose storing in a storage a header associated with the packets flowing through the second point (col. 17 line 58 to col. 18 line 33).

Regarding claim 16:

Kikuchi et al. disclose wherein the storing step comprises: selecting the header; associating the header with the packet flow; and storing the header in a storage location associated with the packet flow (col. 16 lines 25-57 and col. 17 line 58 to col. 18 line 33).

Regarding claim 26:

Kikuchi et al. disclose wherein the step of calculating network performance comprises: determining a delay experienced by a packet flowing from the first point to the second point in the network (col. 1 line 56 to col. 2 line 13).

Regarding claim 27:

Kikuchi et al. disclose wherein the step of determining the delay comprises: determining a first time at which a packet associated with a correlated package flows through the first point in the network; determining a second time at which the packet flows through the second point in the network; and

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subtracting the first time from the second time (col. 1 line 56 to col. 2 line 48).

Regarding claim 32:

Kikuchi et al. disclose wherein the first processing device comprises a source device that divides packets accessed via the first monitoring device into frames and captures information about the packets in packages corresponding to the frames (see the plurality of probing packets which corresponds to the frames and the sending side unit which corresponds to the first processing device in col. 5 lines 8-24 and col. 7 line 63 to col. 8 line 29); and the second processing device comprises a destination device that correlates each package with packets accessed via the second monitoring device and that calculates the network performance information based on the correlated packages (where each n probing packets correspond to a package and the reception side unit corresponds to the second processing device in col. 7 line 63 to col. 8 line 29); wherein the monitoring devices monitor a packet flow from the plurality of packet flows (col. 18 line 34 to col. 19 line 26).

Regarding claim 33:

Kikuchi et al. disclose wherein the source device includes a processor for selecting a header associated with the packets accessed via the first monitoring device (col. 17 line 58 to

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col. 18 line 23), for associating the header with the packet flow, and for storing the header in a storage (col. 16 lines 25-57).

Regarding claim 36:

Kikuchi et al. disclose wherein the packages include a packet flow identifier, a frame number, and a package size (col. 8 line 55 to col.9 line 37).

Regarding claim 39:

Kikuchi et al. disclose wherein the step of receiving information comprises: receiving packages that correspond to the frames and that include information about the packets and the frames (where each n probing packets correspond to the received package in col. 7 line 63 to col. 8 line 29).

Regarding claim 41:

Kikuchi et al. disclose wherein the step of capturing information comprises: capturing information about the packets in packages that correspond to the frames (where each n probing packets correspond to the package in col. 7 line 63 to col. 8 line 29).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi et al. (6,614,763) in view of Rochford et al. (6,487,604).

For claim 24, Kikuchi et al. disclose the method for measuring network performance described in paragraph 5 of this office action. Kikuchi et al. disclose all the subject matter of the claimed invention with the exception of wherein the step

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of calculating network performance comprises: determining a number of packets lost between the first point and the second point in the network.

Rochford et al. from the same or similar fields of endeavor teach that it is known to provide the step of determining a number of packets lost between the first point and the second point in the network (col. 8 lines 55-60). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the step of determining a number of packets lost between the first point and the second point in the network as taught by Rochford et al. in the method for measuring network performance of Kikuchi et al. The motivation for provide the step of determining a number of packets lost between the first point and the second point in the network as taught by Rochford et al. in the method for measuring network performance of Kikuchi et al. being that it provides the added feature of providing a detailed display of network performance for network management applications.

Allowable Subject Matter

9. Claims 3-8, 10-14, 17-23, 25, 28-29, and 34-35 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

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10. Claim 30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rappaport et al. disclose a portable real time cellular telephone and pager network system monitor.

Harrow et al. disclose a system monitoring method and device including a graphical user interface to view and manipulate system information.

12. Any response to this nonfinal action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (2600 Receptionist at (703) 305-4750).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick Hom whose telephone number is (703) 305-4742. The examiner's regular work schedule is Monday to Friday from 8:00 am to 5:30 pm EST and out of office on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao, can be reached at (703) 308-5463.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

SH

September 28, 2003

Seema S. Rao
SEEMA S. RAO 9/30/03
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600